

What is claimed is:

1. A method of providing a user access to a network for a computer configured for a different network without user initiated software or hardware configuration changes comprising the steps of :
  - 1) automatically determining and assigning addressing information for the computer on the foreign network;
  - 2) registering the computer;
  - 3) permitting only registered computers to access the foreign network;
  - 4) storing and maintaining the addressing information; and
  - 5) accessing the foreign network by directing traffic to and from the computer utilizing the addressing information.
2. The method of claim 1 wherein the step of automatically determining and assigning comprises the step of utilizing an IP or ARP packet to determine the computer addresses.
3. The method of claim 2 wherein the step of automatically assigning comprises the step of assigning an IP address to the computer from a pool of IP addresses for the foreign network.
4. The method of claim 3 wherein the step of registering comprises the step of fixing a registration period during which the computer is permitted access to the foreign network.
5. The method of claim 1 wherein the step of maintaining comprises the step of unregistering the computer when the registration period has expired.
6. The method of claim 1 wherein the step of registering comprises the step of collecting and maintaining billing and registration status information.

7. The method of claim 6 wherein the step of maintaining billing information comprises the step of storing the collected information in a database.
8. The method of claim 6 wherein the steps of maintaining the addressing, billing and registration status information comprises the step of periodically backing up the said information.
9. The method of claim 6 wherein the steps of maintaining the addressing, billing and registration status information comprises the step of reloading the most current backup information in the event of a computer failure.
10. The method of claim 6 wherein the step of collecting and maintaining comprises the step of identifying the computer for billing purposes by using SNMP and the network switching architecture to identify the switch port to which the computer is connected.
11. The method of claim 6 wherein the step of collecting and maintaining comprises identifying the computer for billing purposes through use of a preissued access code.
12. A computer readable medium containing the computer instructions which when executed on a computer carries out the steps of claim 1.
13. A server for use with a network to provide access to a computer configured for a different network without reconfiguring the computer through hardware or software comprising:
  - 1) a registration module to register the computer to access the network;
  - 2) a registration driver to sign IP addresses and maintain and access addressing information including IP addresses and MAC addresses;
  - 3) an internal interface to connect the server to the computer;
  - 4) an external interface to connect the server to the network;

- 5) a packet driver module to perform NAT at the internal interface;
  - 6) a packet filter that permits transmission of packets to and from the external interface based on registration status;
  - 7) a DHCP module to service DHCP request based on assigned IP address; and
  - 8) an ARP module that uses the registration driver to provide MAC address for an assigned IP address.
14. The server of claim 13 wherein the registration module further comprises a web based user interface.
15. The server of claim 14 wherein the web based user interface identifies the computer for billing purposes by using SNMP and the network switching architecture to identify the switch port to which the computer is connected.
16. The server of claim 14 wherein the web based user interface identifies the computer for billing purposes through use of a preissued access code.
17. The server of claim 13 wherein the registration driver maintains and accesses the addressing information including the original IP address, the assigned IP address, and the MAC address of the computer, and the registration status information.
18. The server of claim 13 wherein the packet driver module only performs NAT if the original IP address does not equal the assigned IP address.
19. The server of claim 13 wherein the packet filter further provides NAPT as required.